CLAIMS

1. A temperature controlled food container comprising:

an inner portion having sidewalls and an opening for the receipt of food;

an outer portion having sidewalls spaced from said inner portion;

a eutectic gel, disposed between said inner and outer portions;

a ledge extending from the periphery of said outer portion;

a flange extending from the periphery of said inner portion adapted for seating against said ledge; and,

an ultrasonic bond joining said ledge to said flange of said inner portion.

2. The food container as claimed in Claim 1 further comprising:

ribs along the sidewalls of said inner portion.

3. The food container as claimed in Claim 1 further comprising:

ribs along the sidewalls of said outer portion.

4. The food container as claimed in Claim 1 further comprising:

ribs along the sidewalls of said inner and outer portions, which extend sufficiently to provide displacement between said inner and outer portions.

5. The food container as claimed in Claim 1 further comprising:

channels and ridges formed on said ledge or said flange for respective engagement with each other.

6. The food container as claimed in Claim 5 further comprising:

said channels are formed on said ledge for receipt of said ridges formed on said flange.

7. The food container as claimed in Claim 5 further comprising:

said channels are formed with enlarged segments, which extend beyond the cross-sectional dimension of a respective peripheral rib received therein.

8. The food container as claimed in Claim 1 further comprising:

an indentation forming a step at the base of the outer portion which can be seated at least partially into the inner portion opening.

9. A food container comprising:

an outer shell portion having a ledge extending from a wall of said shell;

an inner shell portion having a flange extending from a wall of said shell;

a eutectic gel disposed between said shell portions;

said ledge and flange adapted to be seated against each other;

a channel or a protuberance respectively formed on said ledge or said flange for receipt and engagement of said flange by said channel; and,

an ultrasonic bond formed between said flange and said ledge.

10. The food container as claimed in Claim 9 further comprising:

said ultrasonic bond is formed at least in part between said channel and said protuberance.

11. The food container as claimed in Claim 10 further comprising:

said channel has enlarged portions, which are larger in cross-section than said protuberances to provide for expansion during an ultrasonic bond.

12. The food container as claimed in Claim 11 further comprising:

ribs on at least said inner or outer shell portions between said shells portions.

13. The food container as claimed in Claim 9 further

comprising:

said outer shell portion has a step on the base thereof for resting at least partially within said inner shell portion.

14. The food container as claimed in Claim 9 further comprising:

said channel is formed on said ledge; and,

said protuberance is formed on said flange.

15. The food container as claimed in Claim 14 further comprising:

said channel is one of a plurality formed on said ledge; and,

said protuberance is one of a plurality formed on said flange.

16. A process for making a food container comprising:

molding an outer walled shell of plastic;

molding an inner walled shell of plastic;

forming said outer walled shell with a ledge while molding said shell;

forming a flange of said inner walled shell while molding said shell;

filling said outer walled shell partially with a eutectic gel;

Implacing said inner walled shell interiorly of said outer walled shell while displacing a portion of said eutectic gel between the walls of said inner and outer shells; and,

ultrasonically welding said inner and outer walled shells between their respective ledge and flange.

17. The process as claimed in Claim 16 further comprising:

forming a channel or a protuberance on said ledge or said flange during molding.

18. The process as claimed in Claim 17 further comprising:

flowing a portion of said flange into said channel during the welding process.

19. The process as claimed in Claim 18 further comprising:

forming said channel with an enlargement when molding it with a portion larger than the protuberance placed therein, and,

allowing flow during the welding process of said protuberance into said enlargement.

20. A method for making a food service container comprising:

molding an outer walled shell portion having a ledge with at least one peripheral groove;

molding an inner walled shell portion having a peripheral flange with at least one peripheral land;

flowing a eutectic gel into said outer walled shell;

displacing said gel by said inner walled shell portion to place eutectic gel between the walls of said shells;

indexing said peripheral land into said peripheral groove; and,

ultrasonically causing said peripheral land to be bonded within said groove.

21. The method as claimed in Claim 20 further comprising:

forming gaps in said groove larger than the cross-section of said land; and,

flowing a portion of said land into said gaps.

22. The method as claimed in Claim 21 further comprising:

driving a portion of said land against a sidewall of said groove while ultrasonically bonding said inner and outer shell portions.

23. A food container for providing temperature variances from the ambient comprising:

a plastic outer shell having a peripheral ledge;

a plastic inner shell formed with a peripheral flange;

a peripheral channel or a peripheral protuberance formed on said ledge or said flange for respective engagement with each other;

a eutectic gel disposed between said shells; and,

an ultrasonic bond formed between said ledge and said flange.

24. The food container as claimed in Claim 23 further comprising:

said outer shell formed with a step for nesting at least partially into said inner shell.

25. The food container as claimed in Claim 23 further comprising:

said channels and said peripheral protuberances are indexed into each other and welded substantially to each other.